Consumer Confidence Reports EPA-State Training



Drinking Water Academy

- EPA Is Developing the Drinking Water Academy to Provide Information to States and Regions on a Variety of Office of Water Programs
- EPA has Developed A Web Site Where Training Materials Will Be Located
 - http://www.epa.gov/OGWDW/DWA
- This Training Will Be Available on this Web Site



Agenda

- Welcome and Introductions
- Training Objectives
- CCR Slide Presentation
 - Background on Development of the CCR Rule and Implementation Guidance
 - Overview of the Rule and Key Dates
 - State Adoption and Primacy Revision Applications
 - Detailed Rule Summary
 - Workshops on Reviewing and Preparing CCRs



Background on Development of the CCR Rule and Implementation Guidance



Need for Consumer Confidence Reports

Required by 1996 Safe Drinking Water Act (SDWA)
 Amendments

Public Right-to-Know Emphasized in 1996
 Amendments

 Consumer Confidence Reports (CCRs) Are the Centerpiece of Right-to-Know



CCRs Are:

- A Means for Consumers to Make Informed Decisions Regarding Their Drinking Water
- A Means to Raise Consumers' Awareness Of:
 - What Is Involved in the Delivery of Safe Drinking Water
 - The Sources of Their Drinking Water
 - The Importance of Source Water Protection
- A Tool That
 - Encourages Dialogue Between Consumers and Their Utilities
 - Provides a Starting Point for Consumers to Obtain More Information



Background: CCR Rule

- The CCR Rule Requires All Community Water Systems (CWSs) to Provide Annual Drinking Water Quality Reports to Their Customers
- CCR Regulations Will Apply to All 58,000 CWSs
- 94 Percent of CWSs Are Small Systems that Serve Fewer Than 10,000 People



Rulemaking Process

- The 1996 SDWA Amendments Required EPA to Engage in Broad Consultation While Developing the Regulation
 - Received Comments From Utilities and Consumers
 Nationwide
 - Reviewed Draft Language with an "Expert Panel" of Risk
 Communicators and Health Information Providers
 - Discussed the Rule with the Local Government Advisory
 Committee
 - Convened a Working Group Under the Aegis of the National Drinking Water Advisory Council (NDWAC)

NDWAC Working Group

- NDWAC Working Group Representation
 - Food and Drug Administration (FDA)
 - State Drinking Water Program Representatives
 - Consumer Advocates
 - Local Government
 - Local Health Officers
 - Environmental/Consumer Advocates
 - Community Water Systems
 - Drinking Water Wholesalers
 - Consultants



NDWAC Working Group (cont.)

- NDWAC Reviewed the Working Group's Draft and Made Recommendations
- EPA Based the Proposed Rule on NDWAC's Recommendations
- Proposed CCR Rule Published in the Federal Register on February 13, 1998



Focus Groups

- EPA Held Four Citizen Focus Groups with Randomly-Selected Participants to:
 - Test Mandatory Language
 - Critique Two CCRs (Denver Water and Washington Suburban Sanitary Commission) Based on the Proposed Rule



Development of CCR Implementation Guidance

- Final CCR Rule Published in the Federal Register on August 19, 1998
- Implementation Guidance Intended for Use By:
 - States as They Develop Primacy Revision Applications
 - Regions as They Review the Applications



Development of CCR Implementation Guidance (cont.)

- CCR Implementation Workgroup Formed to Develop Draft CCR Implementation Guidance
- CCR Implementation Workgroup Originally Consisted of EPA Headquarters and Regional Members
- Legally, States Could Not Be Involved in Development of the Guidance Until After Rule Promulgation
- CCR State-EPA Workgroup Meeting Held November 19 and 20, 1998

Implementation Aids

- CCR Implementation Guidance for States and Regions
 - Section 1: Summary of the Rule Requirements
 - Section 2: Violation Determination and Associated Reporting Requirements
 - Section 3: Primacy Revision Applications
 - Appendices: Additional Information and Example Formats
- CCR Guidance for Water Suppliers
- EPA CCR Template (CCR Writer)



Overview of the Rule — Key Dates



Overview of the Rule

- Key Dates of the Rule
 - Delivery Dates for:
 - Existing CWSs
 - New CWSs
 - CWSs That Sell to Another CWS
- Report Content Requirements
- Report Delivery and Recordkeeping Requirements for CWSs
- Recordkeeping Requirements for States



Key Dates of the Rule

A CWS Must:

- Mail or Otherwise Directly Deliver One Copy of the CCR to Its Customers by:
 - October 19, 1999 for the First Report
 - By July 1 Each Year Thereafter for Subsequent Reports
- Provide a Copy of the CCR to the State and Any Other
 Agency the State Designates by the Report Due Date
- Provide a Certification to the State Within 3 Months of the Report Due Date

Certification to the State

- Certification Should Certify That the CWS:
 - Distributed the CCR to its Customers
 - Used in the Report Information That Is Correct and Consistent with Compliance Monitoring Data Previously Submitted to the Primacy Agency
- A CWS Does Have the Option to Deliver the Certification to the Primacy Agency at the Same Time it Delivers the CCR

CCR Delivery Dates for Existing CWSs

Delivery of First CCR
 By October 19, 1999

Delivery of First Certification
 By January 19, 2000

Delivery of Second CCR
 By July 1, 2000

Delivery of Second Certification By October 1, 2000

Delivery of Subsequent CCRs
 By July 1 Annually

Delivery of Subsequent By October 1 Annually Certifications



CCR Delivery Dates for New CWSs

Delivery of First CCR

By July 1 after the First Full Calendar Operating Year

 Delivery of First Certification By October 1 after the First Full Calendar Operating Year

 Delivery of Subsequent CCRs **By July 1 Annually**

 Delivery of Subsequent Certifications By October 1 Annually



CCR Delivery Dates for CWSs That Sell to Another CWS

 Delivery of Data for First CCR By April 19, 1999 (6 Months Before Retailers Are Required to Prepare Their CCR)

 Delivery of Data for Subsequent CCRs By April 1 Annually (3 Months Before Retailers Are Required to Prepare Their CCR)

Wholesalers Must Deliver Their Data to the System(s)
 Purchasing Water by the Dates Shown, <u>Unless</u> a
 Different Date is Agreed to and Specifically Included in a Contract Between the Two Parties



State Rule Adoption and Primacy Revision Applications



Primacy Requirements

- §1413 of SDWA
- 40 CFR 142
- Primacy Rule
 - Interim Primacy Provision
 - Increased Time Period to Adopt Federal Rules
 - Administrative Penalty Authority
 - Expanded Definition of a Public Water System (PWS)



Primacy Rule: Interim Primacy Provision

- Grants Interim Primary Enforcement Authority to States While Their Applications to Modify Existing Primacy Programs Are Under Review
- Begins on the Date of the Submission of a Complete and Final Primacy Revision Application or the Effective Date of the State Regulation, Whichever Is Later
- Ends When a Final Determination Is Made Under 40 CFR 142.12(d)(3)

Primacy Rule: Interim Primacy Provision (cont.)

- Prerequisites for Interim Primacy 40 CFR 142.12(e)
 - State Must Have an Approved Primacy Program for All NPDWRs Promulgated to Date When a New or Revised Regulation Is Promulgated
- Combining Primacy Revision Applications
 - States May Combine Two or More Rules in One Revision
 Package and Receive Interim Primacy for Both
 - Interim Primacy Then Treated As Full Primacy for Other Rules Included in the Application



Primacy Revision Applications

- Must Be Submitted Following the Procedures in 40 CFR 142.12 (b) to (d)
- States Must Submit a Complete and Final Primacy Revision Application by August 21, 2000, <u>Unless</u>
 They Have Been Granted an Extension
- Until States Receive Interim Primacy, EPA is the Primacy Agent Directly Responsible for Implementing the CCR Rule



Primacy Revision Applications: Content

- State Primacy Checklist
- Text of the State Regulation
- Primacy Revision Crosswalk
- Checklist of State Reporting and Recordkeeping
- Attorney General's Statement of Enforceability



State Primacy Checklist

(Example Format)

Required Program Elements		Revision to State Program (Yes or No)	EPA Findings/Comments
§142.10	Primary Enforcement		
§142.10(a)	Regulations No Less Stringent		
§142.10(b)(1)	Maintain Inventory		
§142.10(b)(2)	Sanitary Survey Program		
§142.10(b)(6)(vii)	Authority to Require CWSs to Provide CCRs		



Primacy Revision Crosswalk

(Example Format)

FEDERAL REQUIREMENT	FEDERAL CITATION	STATE CITATION Document title; page number; and section or paragraph	If different than federal requirement, note here and explain on separate sheet
Definitions	§141.153(c)		
General Requirements	§141.152		
Content of the CCRs	§141.153; §141.154		



State Reporting and Recordkeeping Checklist (Example Format)

Requirement	Are State policies consistent with federal requirements? If not, explain		
§142.16 (f) - Records kept by the States			
Each state must make CCRs submitted available to the public upon request			
Each state must maintain a copy of the CCRs for a period of one year			
Each state must keep a copy of the certifications obtained for a period of 5 years			
Each state must report violations in accordance with the requirements of §142.15(a)(1)			



Attorney General's Statement of Enforceability (Example Format)

I hereby certify,	pursuant	to my authori	ty as(1)		and in acco	ordance with the Safe
Drinking Water	Act as am	ended, and _	(2)	, that i	n my opinio	n the laws of the State
] to carry out the
program set for	th in the "	Program Desc	cription" subm	itted by the	(5)	have been duly
adopted and are	e enforcea	ble. The spec	cific authorities	s provided are	contained i	n statutes or regulations
that are lawfully	adopted	at the time thi	s Statement is	approved and	signed and	will be fully effective by
the time the pro	gram is a	pproved.				·
·						
Seal of Office						
	Signatur					
	Name (Ty	ype or Print)			_	
	`	,				
	Title					
	Date					

- (1) Attorney General or attorney for the primacy agency if it has independent legal counsel
- (2) 40 CFR 142.12 (c)(1)(iii) for final requests for approval of program revisions
- (3) Name of State or Commonwealth
- (4) Name of Tribe
- (5) Name of Primacy Agent



Primacy Revision Applications: Extension Procedures

- State Extension Request Must Include a Schedule for Submission of a Final Request, and
- Sufficient Information to Demonstrate That:
 - The State Cannot Submit a Package Because of One of the Reasons Below:
 - Currently Lacks the Legislative or Regulatory Authority for Enforcement; or
 - Currently Lacks the Program Capability to Implement; or
 - Is Requesting the Extension to Group 2 or More Program Revisions; and
 - The State is Implementing the Requirements Within the Scope of it Current Authority and Capabilities

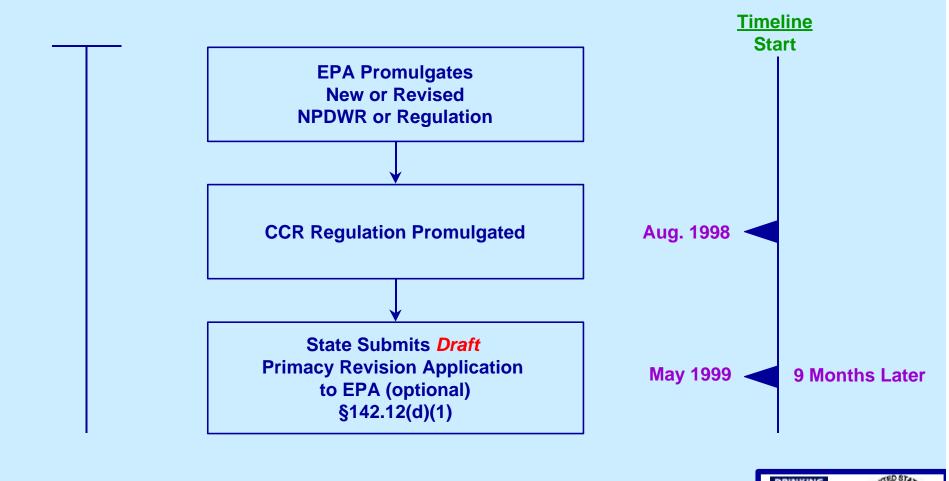


Primacy Revision Applications: The Review Process

- EPA Recommends a 2-Step Process
 - Submission of Draft Request (Optional)
 - Submission of Complete and Final Request
- For Complete and Final Revision Applications
 - Review Process: 90 Days
 - Time Split Equally Between Regions and HQ: 45 Days
 - Regional Review (Program and Regional Counsel)
 - HQ Review (OGWDW, OECA, OGC)

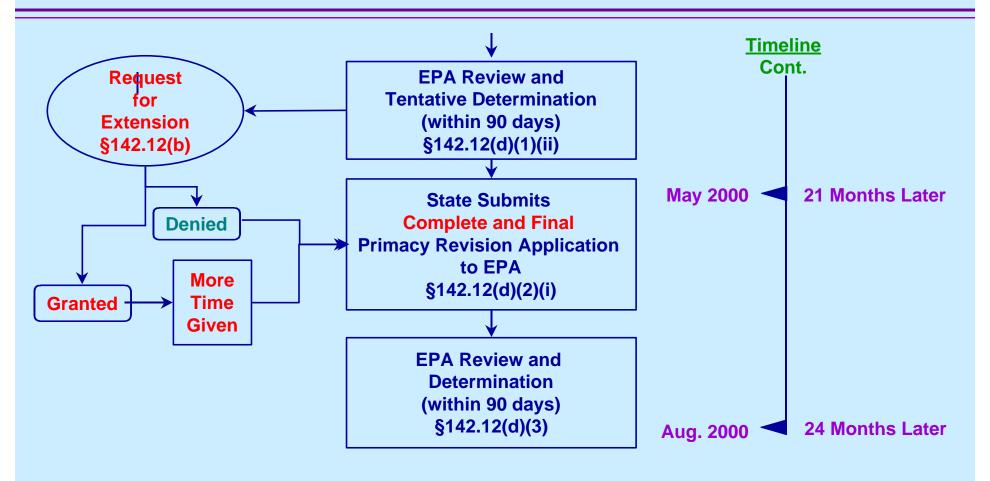


Primacy Revision Applications: The Review Process (cont.)





Primacy Revision Applications: The Review Process (cont.)





State/EPA Implementation Agreements

- The Updated 40 CFR 142.12 Explains That States Must Adopt the Requirements of the CCR Rule Within 2 Years of the Final Rule's Publication or by August 21, 2000
- Most States Will Not Have Interim Primacy for the CCR Rule by October 19, 1999, When the First Reports Are Due
- Most Likely That the States and EPA Will Implement the Regulation in Partnership at Least for the First Set of Reports

State/EPA Implementation Agreements (cont.)

- Purpose of State/EPA Implementation Agreements:
 - To Clearly Delineate the Responsibilities of the States
 During this Interim Period
 - To Allow EPA to Step in and Implement the Rule Where the State Is Not Able to Implement the Rule
- Bottomline: The States and EPA Must Agree on the Responsibilities of Each Party and Have That Agreement Documented

State/EPA Implementation Agreements (cont.)

- Two Options For State/EPA Implementation Agreements
 - Region Independently Documents EPA Regional and State Roles
 - This Option Can Only Be Used Until August 21, 2000
 - Jointly Signed Memorandum of Understanding (MOU)
 That Describes the States and EPA's Roles



Areas of State Flexibility

Governor's Mailing Waiver

- For CWSs Serving Fewer Than 10,000 Persons
- States in Accordance With Their Laws Can Establish
 Criteria for Obtaining and Renewing a Mailing Wavier

Additional Public Notice

- Systems Must Deliver the Report to Any Other Agency or Clearinghouse Identified by the Primacy Agency
- Example: State or Local Public Health or Environmental Departments, Public Utility Commissions, and Consumer Advocates Offices

Areas of State Flexibility (cont.)

- Alternative Form and Content
 - Under §141.151(e), Primacy States May Adopt Alternative Requirements for the Form and Content of Reports
 - Must Provide for the Same Type and Level of Information as Specified in the Federal Rule
 - Must Provide Equivalent Level of Public Information and Education
 - States Do Not Have Flexibility to Change Form and Content Until They Have Obtained Interim Primacy



Alternative Form and Content: MCL Reporting Format

- §141.153(d)(4)(i) Requires That the MCL Be Reported As a Number Greater Than or Equal to 1
- Focus Group Research Conducted by EPA and AWWA Has Shown That Many Consumers Have Trouble Understanding Decimals
- EPA Believes Reporting the MCL in Other Formats
 Does Not Provide and Equivalent Level of Public
 Information and Education

MCL Reporting Format

Atrazine	MCLG	MCL	Detected
Compliance Values (mg/L)	0.003	0.003	0.0003
CCR Units (ppb)	3	3	0.3



Areas of State Flexibility (cont.)

Areas of State Flexibility for Content Requirements

§141.153(b)Source Water Assessment

Information

- §141.153(c) Definitions: MCL, MCLG, TT, AL,

and Variances and Exemptions

§141.153(d)(4)(ix)Likely Source(s) of Detected

Contaminants

§141.153(d)(6),
 §141.153(f)(3)-(f)(4)
 Regulated Contaminants



Areas of State Flexibility (cont.)

Areas of State Flexibility for Content Requirements (cont.)

§141.153(h)(1)
 Explanation of Contaminants

Reasonably Expected to Be Found

in Drinking Water, Including

Bottled Water

§141.154(a)
 Vulnerable Populations Warning

- §141.154(b) to (d) Educational Statements for Arsenic,

Nitrate, and Lead



Detailed Rule Summary Report Content Requirements



Report Content Requirements

Item	Report Content Requirements
1	Required Information About the Water System
2	Source(s) of Water
3	Definitions
4	Reporting the Levels of Detected Contaminants



Report Content Requirements (cont.)

Item	Report Content Requirements
5	Information on <i>Cryptosporidium</i> , Radon, and Other Contaminants
6	Required Additional Health Information
7	Information on Violations of NPDWR
8	Information if the System is Operating Under a Variance or Exemption



Item 1 — Water System Information

- Telephone Number for Contact Person
- Information on Opportunities for Public Participation
- Non-English Speaking Notice
 - Primacy Agency Will Determine When this Is Required
 - Notice to Large Proportion of Non-English Speaking Residents in Their Language

Item 2 — Information on Water Source(s)

- Type of Water
- Commonly-Used Name(s)
- Location(s) of Water Source
- Information on Source Water Assessments
 - Notice of Availability and Means to Obtain Completed Assessments
 - Summary of System's Susceptibility to Potential Sources of Contamination if the System Has an Assessment Which was Provided by or Approved by the Primacy Agency

Item 3 — Definitions

REQUIRED

- Maximum Contaminant Level (MCL)
 - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG)
 - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.



Item 3 — Definitions (cont.)

If Applicable

- Treatment Technique (TT)
 - A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL)
 - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Variances and Exemptions
 - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

- CCR Key Element <u>Table(s)</u> Reporting Levels of Detected Contaminants Subject to Mandatory Monitoring
- If the Following Contaminants are <u>Detected</u>, the Table(s)
 Must Contain the Appropriate Monitoring Data:
 - Regulated Contaminants (i.e. Subject to an MCL, AL, or TT)
 - Unregulated Contaminants as Specified in 40 CFR 141.40
 - Finished Water DBPs or Microbial Contaminants From Monitoring Under the Information Collection Rule (Except Results for Cryptosporidium)
- The Table(s) May Only Include Information on Detected Contaminants, All Other Information Must Be Displayed Elsewhere

- Systems Must Report Monitoring Data Completed During the Previous Calendar Year
- Results from the Most Recent Testing Period Should Be Included for Systems:
 - That Monitor Less Frequently Than Annually
 - That Have Monitoring Waivers
 - CCR Should Include a Statement That Monitoring Is Done in Accordance With Regulations
- No Data Older Than 5 Years Need Be Included in the Report



 A Detected Contaminant is: Any Contaminant Detected At or Above EPA's Minimum Detection Limits Prescribed by:

- 40 CFR 141.23(a)(4)(i) For Inorganics

- 40 CFR 141.24(f)(7) For Organics Listed in 40 CFR 141.61(a)

- 40 CFR 141.24(h)(18) For Organics Listed in 40 CFR 141.61(c)

40 CFR 141.25(c)For Radionuclides



- Table(s) Must Display for Each Detected Contaminant:
 - MCL for the Contaminant Expressed as a Number Greater
 Than or Equal to 1
 - If A Contaminant is Regulated by TT or AL, Include That Value Instead of the MCL
 - MCLG for the Contaminant in the Same Units as the MCL
 - Highest Level of the Contaminant Used to Determine Compliance and the Range of Detected Levels
 - Expressed in the <u>Same Units</u> as the MCL



Contaminant (units)	MCL	MCLG	Town Water Level Found	Range of Detections	Sample Date	Violation	Typical Source
Organic Contaminants							
Atrazine (ppb)	3	3	4	0.1 - 10		Yes	Runoff from herbicide used on row crops.



- For Detected Unregulated Contaminants for Which Monitoring Is Required (except Cryptosporidium)
 - Table(s) Must Contain the Average of Any Monitoring Results from the Year and the Range of Detections
 - The CCR May Also Include a Brief Explanation for Why a System Monitors for Unregulated Contaminants



- Table(s) Must Contain The Likely Source(s) of Each Detected Contaminant, According to the Best Information Known to the Water System
- Specific Information Regarding Contaminants
 Should Be Used When Available
- If the System Is Uncertain of a Contaminant's Source, It Must Include One or More of the Typical Sources From Appendix B of the Rule That Is Most Applicable to the Local Situation

- For Any Detected Contaminant That Violates an MCL, a TT, or Exceeds an AL, the CCR Must Contain:
 - A Clear Indication in the Table(s) of the Violation or Exceedence
 - Near By, but Not In, the Table(s), a Clear and Easy to Understand Explanation of the Violation
 - An Explanation of the Violation Includes Length, Potential Health Effects, and CWSs Actions



- Systems That Distribute Water to Their Customers from Multiple Hydraulically Independent Distribution Systems Fed From Different Raw Water Sources Should:
 - Include in the Table(s) Separate Columns for Detection
 Data for Each Service Area
 - Include a Description of the Area Served by Each Distribution System



How Do You Report Monitoring Data If Compliance is Determined:

- Annually or Less Frequently?
 - Highest Detected Level and Range
- By a Running Annual Average of All the Samples Taken From a Sampling Point?
 - Highest Average at One Point and Range of All Points
- By Calculating a Running Annual Average of All the Samples at All the Sampling Points?
 - Average and Range of All Samples



Rounding Detected Levels

- Prior to Conversion to MCL Equivalent Units
- Example: Glyphosate Detected at 0.055 mg/l

	Detected (mg/l)	Compliance (mg/l)	Multiply by	Units For CCR (ppb)
Monitoring	0.055	0.06	1,000	60
MCL		0.7	1,000	700



How Do You Report Monitoring Data For Turbidity?

- For Turbidity MCL
 - Include the Highest Average Monthly Value
 - Although an Explanation for Why Turbidity Is
 Measured is Not Required in this Situation, a CWS May
 Wish to Include Such an Explanation
- For Criteria to Avoid Filtration
 - Include the Highest Single Measurement in a Month
 - An Explanation for Why Turbidity is Measured Should Be Included

How Do You Report Monitoring Data For Turbidity? (cont.)

- For a TT/Indicator of Filtration Performance
 - Include the Highest Single Measurement and the Lowest Monthly Percentage of Samples Meeting the Turbidity Limits for the Relevant Filtration Technology
 - An Explanation of the Reasons for Measuring Turbidity
 Must Be Included



Revised Turbidity Reporting Requirements

- Revised, by the Interim Enhanced Surface Water Treatment Rule (IESWTR)
- For Systems Using Conventional or Direct Filtration
 - Current Standard
 - 5 NTU/Maximum and 0.5 NTU in At Least 95 Percent of Samples
 - Revised Standard
 - 1 NTU/Maximum and 0.3 NTU in At Least 95 Percent of Samples
- New Requirement Becomes Effective in 2001



How Do You Report Monitoring Data For:

Lead and Copper?

 Include the 90th Percentile Value from the Most Recent Sampling and the Number of Sampling Sites Exceeding the Action Level

Total Coliform?

- For Systems That Collect Fewer Than 40 Samples Per Month
 - Include the Highest Number of Positive Samples Collected in One Month
- For Systems That Collect 40 or More Samples per Month
 - Include the Highest Percentage of Positive Samples
 Collected in One Month



How Do You Report Monitoring Data For: (cont.)

- Fecal Coliform?
 - Include the Total Number of Positive Samples for the Year
- E. Coli?
 - Systems That Test for *E. Coli* Should Include the Total Number of Positive Samples for the Year



How Do You Report Monitoring Data For: (cont.)

- Radiological Contaminants?
 - Regulated Contaminants (Radium-226, Radium-228, Gross Alpha, and Beta Particle and Photon Radioactivity) When Detected at Levels Above the Minimum Detection Limit
 - The MCL for Beta Particles is 4 mrem/year. EPA considers 50 pCi/L to Be the Level of Concern for Beta Particles.



Item 5 — *Cryptosporidium*, Radon, Other Contaminants

- If Cryptosporidium and/or Radon Are Not Detected, the System is Not Required to Discuss the Monitoring or the Results
- If Cryptosporidium and/or Radon Are Detected, the System Must Include the Required Information Outside of the Table(s) of Detected Contaminants



Item 5 — Cryptosporidium

- If Cryptosporidium Monitoring Indicates a Presence of Cryptosporidium the CCR Must Contain:
 - A Summary of the Monitoring Results
 - CWSs May Choose Whether or Not to Report the Actual Analytical Results as a Part of This Summary
 - An Explanation of the Significance of the Results



Item 5 — Radon

- If Radon Monitoring Indicates a Presence of Radon in the Finished Water the CCR Must Contain:
 - The Monitoring Results
 - An Explanation of the Significance of the Results



Item 5 — Other Contaminants

Other Contaminants

- Including Information in the CCR Optional
 - EPA <u>Strongly Encourages</u> CWSs to Report Any Results That May Indicate a Health Concern
- Recommended That the Report Include:
 - Monitoring Results
 - Explanation of the Significance of the Results Noting the Existence of a Health Advisory or a Proposed Regulation
- Resources for Information
 - EPA's Safe Drinking Water Hotline: 800-426-4791
 - EPA Website: www.epa.gov/safewater/hfacts.html



- Every CCR Must Contain 2 Statements Prominently Displayed Somewhere in the Report
 - Drinking Water/Bottled Water Contaminant Explanation
 - Warning about the Vulnerability of Some Populations to Contaminants in Drinking Water



- Drinking Water/Bottled Water Contaminant Explanation
 - Explanation Contains Both Mandatory Language and Language That Can Be Altered by the System
 - Mandatory Language [§141.153(h)(1)(iv) of the Rule]
 - Every CCR Must Contain This Text
 - Statement That the Presence of Contaminants Does Not Necessarily Indicate a Health Risk
 - Include EPA's Safe Drinking Water Hotline Number



Mandatory Language (cont.)

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

- Language That Can Be Altered by the System
 [§141.153(h)(1)(i) (iii) of the Rule]
 - Information on Sources of Drinking Water
 - Contaminants That May Be Present in Source Water
 - Why EPA and the Food and Drug Administration (FDA)
 Establish Regulations

- Warning about the Vulnerability of Some Populations to Microbial Contaminants in Drinking Water
 - Explanation Encourages Those Who May Be Particularly at Risk from Infections to Seek Advice from Health Care Provider
 - EPA Safe Drinking Water Hotline Number Included to Access More Information
 - Mandatory Language Provided



 Mandatory Language for Warning to Vulnerable Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

 Every CCR Must Contain This Explanation, Prominently Displayed Somewhere in the Report

- Educational Information about Arsenic, Nitrate, and Lead, If Detected as Follows:
 - If Arsenic Found At Least 25 μg/l (50 Percent of MCL),
 But Below the MCL
 - If Nitrate Found At Least 5 mg/l (50 Percent of MCL),
 But Below the MCL
 - If Lead Above Action Level in More than 5 Percent but Fewer than 10 Percent of Homes Sampled



- TTHMs Health Effects Language
 - EPA Has the Authority to Require Health Effects
 Language for Up to Three Regulated Contaminants
 - EPA Is Requiring Additional Health Effects Language for Systems that Exceed the New MCL for TTHMs, But are Below the Current MCL
 - Current MCL 100 ppb
 - Revised MCL 80 ppb
 - Compliance with the Revised MCL is Not Required Until 2001 for Subpart H Systems
 - Compliance for All Systems Is Not Required Until 2003



Item 7 — Information on NPDWR Violations

- Violations of the National Primary Drinking Water Regulation (NPDWR) Requirements Listed Below Must Be Reported:
 - Monitoring and Reporting of Compliance Data
 - Recordkeeping of Compliance Data
 - Filtration and Disinfection Prescribed by Subpart H (40 CFR 141.70 to 141.75)
 - Lead and Copper Control Requirements Prescribed by Subpart I (40 CFR 141.80 to 141.84)



Item 7 — Information on NPDWR Violations (cont.)

- Violations of the NPDWR Requirements Listed Below Must Be Reported: (cont.)
 - Treatment Techniques for Acrylamide and Epichlorohydrin
 Prescribed by Subpart K (40 CFR 141.110 141.111)
 - Special Monitoring Requirements Prescribed by:
 - 40 CFR 141.40 for Inorganic and Organic Contaminants
 - 40 CFR 141.41 for Sodium
 - Violation of the Terms of a Variance, an Exemption, or a State or Federal Administrative or Judicial Order



Item 7 — Information on NPDWR Violations (cont.)

- For These Violations the CCR Must Include:
 - A Clear and Readily Understandable Explanation of the Violation
 - Any Potential Adverse Health Effects
 - Steps the CWS Has Taken to Correct the Violation



Item 7 — Information on NPDWR Violations (cont.)

- EPA is Requiring Mandatory Language to Describe the Health Significance for Only 3 NPDWR Violations
 - Filtration and Disinfection (Subpart H)
 - Lead and Copper Control Requirements (Subpart I)
 - TTs for Acrylamide and Epichlorohydrin (Subpart K)
- Explanations for the Remaining 4 NPDWR Violations
 Should Be Tailored to Each Violation



Item 8 — Information if CWS Operating Under a Variance or Exemption

- CCR Must Contain an Explanation for Why Variance or Exemption Was Issued
 - Reasons for Issue
 - Date of Issue and When it is Up For Renewal
 - What the System Is Doing to Remedy the Problem
 - Notice of Any Opportunity for Public Input in Review or Renewal of Variance or Exemption



CCR Compliance Checklist

- Guidance Contains an Optional Checklist That States May Use to:
 - Determine if the System has Met the Content Requirements
 - Determine if the System has Met the Delivery Requirements



Workshop 1

 Review Example Consumer Confidence Report Provided by EPA in the Guidance for Water Suppliers



Workshop 1



Workshop 1





Detailed Rule Summary

Report Delivery and Recordkeeping Requirements for CWSs



Report Delivery and Recordkeeping Requirements for CWSs

Item	Report Delivery and Recordkeeping Requirements for CWSs
1	CCR Delivery to Customers
2	"Good Faith" Effort for Delivery to Non-Bill Paying Consumers
3	Delivery of CCR and Certification to Primacy Agency
4	CCR Delivery to Other Agencies



Report Delivery and Recordkeeping Requirements for CWSs (cont.)

Item	Report Delivery and Recordkeeping Requirements for CWSs	
5	CCR Availability to the Public	
6	CCR Availability on the Internet	
7	Mailing Waiver to CWSs Serving Fewer Than 10,000 Persons	
8	CWS Keeping Copies on File	



CCR Delivery Requirements for CWSs

- Systems Must Mail or Otherwise Directly Deliver
 One Copy of the CCR to:
 - Customers
 - Primacy Agency
 - Any Other Agency Identified by the Primacy Agency
 - Examples: Public Utility Commission; State Consumer Advocate



CCR Delivery Requirements for CWSs (cont.)

- "Good Faith" Efforts
 - Systems Must Make "Good Faith" Efforts to Reach Consumers Who Do Not Receive Water Bills
 - Example: Renters
 - "Good Faith" Efforts Include, But Are Not Limited to:
 - Internet Posting
 - Mailing to Postal Patrons
 - Publishing in Local Newspapers
 - Delivering Multiple Copies to Single-Biller Customers
 - Posting CCR in a Public Place (i.e., Schools or Libraries)



CCR Delivery Requirements for CWSs (cont.)

Certification

- Systems Must Send to the Primacy Agency, Within
 3 Months From the Report Due Date a Certification Letter
- Letter Certifies the System Has:
 - Distributed the CCR to Its Customers
 - Used in the Report Information That Is Correct and Consistent With Compliance Monitoring Data Previously Submitted to the Agency
- Systems Have the Option of Mailing the Certification at the Same Time It Delivers the CCR to the Primacy Agency

CCR Certification: Basic Example Format

System name	e:	
PWS I.D. no:		
Confidence availability system ce	nunity water system indicated above he se Report has been distributed to custory y have been given) in accordance with a ertifies that the information contained in compliance monitoring data previously s	mers (and appropriate notices of 40 CFR §141.155. Further, the the report is correct and consistent
Certified by:	Name	
	TitlePhone #	



CCR Delivery Requirements for CWSs (cont.)

- Systems Must Make Reports Available to the Public Upon Request
 - Systems Must Keep Copies of Past CCRs on File for at Least 5 Years
- Systems Serving 100,000 Must Post CCRs on the Internet
 - EPA Will Link to Reports That It Is Aware of
 - Trade Associations May Provide this Service to Members

CCR Delivery Requirements for CWSs (cont.)

- Small Systems (Serving Fewer Than 10,000 People)
 - Must Prepare a CCR
 - May Be Exempt From Mailing CCR
 - If a System is Granted a Mailing Waiver, the System Must Advertise the Availability of the CCR



CCR Mailing Waivers

- Under §141.155(g), Mailing of the CCR Can Be Waived For Systems Serving Fewer Than 10,000 People by the Following Authorities:
 - The Governor of a State or His/Her Designee
 - A Tribal Leader If the Tribe Has Met the Requirements for Tribal Eligibility under §142.72
 - The EPA Regional Administrator on Some Indian Lands
 Where No Tribe Has Been Deemed Eligible
- Systems Are Still Expected to Use "Good Faith"
 Efforts to Reach Non-Bill Paying Customers

CCR Mailing Waivers (cont.)

- System Serving Fewer Than 10,000, but More Than 500 Persons
 - Must Publish the Report in One or More Local Newspapers
 - Inform Customers That the CCR Will Not Be Mailed
 - Provide Information on the Availability of the CCR
 - Options Include: A Note in the Water Bill, or Any Other Means Approved by The Primacy Agency
 - Must Make the CCR Available to the Public Upon Request



CCR Mailing Waivers (cont.)

- Systems Serving 500 or Fewer Persons
 - Must Provide Notice to Their Customers That the CCR is Available By:
 - Mail
 - Door to Door Delivery
 - Posting a Notice in a Public Location (i.e., Libraries, City Hall, Grocery Store Bulletin Boards)
 - Must Make the CCR Available to the Public Upon Request

CCR Mailing Waiver: Primacy Agency

- If Allowed by State Law, A Governor May Delegate Authority to Sign Waivers to the State Drinking Water Administrator
- The Waiver Can Be Included In the State Regulations
 When the Regulation is Promulgated
- A Governor May Issue the Waiver Before the State Has Promulgated Its Own Regulation
- States Can Establish Criteria for Obtaining and Renewing Waivers

Report Recordkeeping Requirements

States

- States Must Maintain a Copy of the Report for Each
 Water System for a Period of 1 Year
- States Must Also Keep the Corresponding
 Certifications CWSs Send for a Period of 5 Years

CWSs

 Must Keep Copies of Past Reports for a Minimum of 5 Years



Violation Determination

- Two Types of Violations Proposed for the CCR Rule
 - Major Violation
 - CCR Report Violation (Failure to Produce and/or Deliver Report)
 - Minor Violation
 - CCR Adequacy/Availability/Content Violation



Violation Determination (cont.)

- CCR Report Violation (Major)
 - When the CWS Fails to Produce and Deliver a Copy of the CCR to the Public and to the Primacy Agency by the Due Date in the Rule:
 - First Report by October 19, 1999
 - Subsequent Reports by July 1, Each Year Thereafter
 - If the State Determines That the Report Is Significantly Deficient in Content, Contains Falsified Information, or That the System Failed to Adequately Deliver the Report



Violation Determination (cont.)

- CCR Adequacy/Availability/Content Violation (Minor)
 - When the CWS Fails to Include the Required Language,
 Content and/or Meet the Requirements to make the
 Reports Available to the Public as Specified in the Rule
 - When the CWS Fails to Provide the Required
 Certification to the Primacy Agency Within 3 Months of the Required Delivery Date



CCR Compliance Strategy

- EPA Expects That States Will Inform All CWSs of the Requirements to Complete CCRs
- CWSs Are Responsible for Completing CCRs
- EPA Is Developing a CCR Compliance Strategy
- Goals:
 - Ensure CCRs Are Issued in a Timely Manner
 - Provide the Best Public Education Possible
 - Consistent Approach for Systems That Do Not Prepare Reports



CCR Compliance Strategy (cont.)

Assumptions

- Simple
- Strategy Outlines EPA Actions
- EPA Could Forego Steps of the CCR Compliance
 Strategy Where a State Has Agreed, Through A
 State/EPA Implementation Agreement, to Undertake
 Steps
- Strategy Implemented for All States Until They Receive Interim Primacy



CCR Compliance Strategy (cont.)

- CCR Compliance Strategy Steps
 - Compliance Determinations
 - EPA Would Work With States to Verify Receipt of Reports by the Due Date and Compile a List of Systems That Did Not Issue Reports
 - Non-Compliance Letters and Regional Press Releases
 - Approximately One Month After Violations Are Required to Be Reported to SDWIS, EPA Would Send Letters to Systems on List
 - Letter Informs Systems of Their Violation Status, Steps to Return to Compliance, Time Frames, and Possible Enforcement Actions
 - EPA Press Release Naming Systems That Did Not Issue A Report
 - Formal Enforcement Actions



CCR Compliance Strategy (cont.)

Quality Check on Reports

- It is Important for EPA to Show a Meaningful Effort in Reviewing the Quality of Some Reports
- EPA Recognizes that Regions and States Have Limited Resources and May Wish to Prioritize the Allocation of Those Resources in Reviewing CCRs
- Substance of Reviews May Vary by State
- Some Options Include:
 - Systems Serving More Than 100,000 Persons
 - Random Checks
 - Systems with a History of Violation or Current SNCs



Consumer Confidence Reports EPA-State Training



Day 2 — Preparing a CCR

Report Content Requirements

Item	Report Content Requirements
1	Required Information About the Water System
2	Source(s) of Water
3	Definitions
4	Reporting the Levels of Detected Contaminants



Report Content Requirements (cont.)

Item	Report Content Requirements
5	Information on <i>Cryptosporidium</i> , Radon, and Other Contaminants
6	Required Additional Health Information
7	Information on Violations of NPDWR
8	Information if the System is Operating Under a Variance or Exemption



How to Prepare a CCR



Where to Begin?

- Compile Essential Water System Data
- Compile Monitoring and Compliance Information
- Identify Data Required for the CCR
- Format Critical Data



Where to Begin? (cont.)

- Compile Desired Optional Information
- CCR Production
- CCR Delivery to Customers, Primacy Agency, etc.
- CCR Certification to Primacy Agency



Compile Essential Water System Data

- Data for the Previous Calendar Year
- The Most Recent Results (Up to 5 Years Old) for Contaminants Monitored Less Than Once per Year
- Compliance Data for Public Notice, Variance or Exemption Information
- Source Water Assessment Report, If Completed
- All Data Organized by Multiple Hydraulically Independent Distribution Systems

Compile Essential Water System Data (cont.)

- Wholesalers Must Provide Data by April 19, 1999 and By April 1 of Subsequent Years
- Alternative Contractual Arrangements May Be Made

 Retailer Is Responsible for Distribution of the Report and Certification



Compile Essential Water System Data (cont.)

- Telephone Number for Contact Person
- Non-English Speaking Notice
- Information on Opportunities for Public Participation
- Information on Source Water Assessments
- Type of Water
- Commonly-Used Name(s)
- Location(s) of Water Source



Compile Monitoring and Compliance Information: Compliance Status

- Treatment Technique Violations, MCL Violations, or Other Violations of NPDWRs
 - Monitoring Data Used to Determine Compliance
 - The Length of Each Violation
 - A Clear and Readily Understandable Explanation of the Violation
 - Potential Adverse Health Effects Using Mandatory Language
 - Actions Taken by the System to Address the Violation
 - Administrative or Judicial Order



Compile Monitoring and Compliance Information: Compliance Status (cont.)

- Requirements for Systems Operating under a Variance or Exemption
 - Explanation of the Variance or Exemption
 - Date of Issuance of the Variance or Exemption
 - Reasons for Issuance of the Variance or Exemption
 - Notices of Public Opportunity for Input in the Review or Renewal of the Variance or Exemption



Compile Monitoring and Compliance Information: Compliance Status (cont.)

- Additional State-Specific Requirements (As Applicable)
 - Fluoridation
 - Mandatory Disinfection of Ground Water
 - Operating Without a Certified Operator
 - Other



Identify Data Required for the CCR

Total Coliform

- For Systems Collecting Fewer than 40 Samples per Month, the Highest Monthly Number of Positive Samples
- For Systems Collecting 40 or More Samples per Month,
 the Highest Monthly Percentage of Positive Samples
- Fecal Coliform and E. Coli
 - The Total Number of Positive Samples



- 1 Sampling Site/1 Sampling Date:
 - March 1998: 0.003
 - Report in Table: Highest Detected Level = 0.003
 - Report No Range



Multiple Sampling Sites/1 Sampling Date:

Barium	Feb 1998		
Well 1	0.60		
Well 2	0.46		
Well 3	N/D		

Report in Table: Highest Compliance Level = 0.60 and

Range: N/D - 0.60



1 Sampling Site/Multiple Sampling Dates:

Atrazine	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
	1998	1998	1998	1998
Well 1 (ppb)	1	4	2	1

Report in Table: Average = 2 and Range: 1 - 4



Multiple Sampling Sites/Multiple Sampling Dates:

total trihalomethanes	2nd quarter 1997	3rd quarter 1997	4th quarter 1997	1st quarter 1998	2nd quarter 1998	3rd quarter 1998	4th quarter 1998
site #1	-	-	-	45	60	125	70
site #2	-	-	-	40	55	115	60
site #3	-	-	-	45	60	105	70
site #4	-	-	-	50	65	135	80
quarterly average	55	125	65	45	60	120	70
rolling annual average	-	-	-	73	74	73	74

Report in Table: Highest ComplianceLevel = 74 and Range 40 - 135



- Lead and Copper Rule
 - The 90th Percentile Value of the Most Recent Round of Sampling and the Number of Sampling Sites Exceeding the Action Level
 - Lead Values and Educational Statement If More Than
 5 Percent but Fewer Than 10 Percent (If 20 or More Samples Are Collected) of the Homes Sampled Exceed the Action Level



- Detected Unregulated Contaminants for Which Monitoring Is Required
- Such as Unregulated Organic Chemical Contaminants, but Excluding Cryptosporidium Monitoring Required by the ICR
 - The Average and Range at Which the Contaminant Was Detected



- Radiological Contaminants
 - Regulated Contaminants (Radium-226, Radium-228, Gross Alpha, and Beta Particle and Photon Radioactivity) When Detected at Levels above the Minimum Detection Limit
 - Radon, If Detected, Include the Results of the Monitoring and an Explanation of the Significance of the Results



- Monitoring Results for Other Contaminants
 - Cryptosporidium, If Detected in the Source Water or Finished Water, Include a Summary of the Results of the Monitoring and an Explanation of the Results of the Monitoring
 - Results for Giardia and/or Viruses Only If Found in Finished Water Through ICR Monitoring
 - Detected Chemical Contaminants for Which Monitoring Is Not Mandated (e.g. MTBE)

- The Likely Sources of Detected Contaminants to the Best of the Water System's Knowledge
- Information Sources:
 - Sanitary Surveys
 - Source Water Assessments
 - Other documents?



Identify Data Required for the CCR: Turbidity

- Unfiltered Surface Water Required to Install Filtration
 - The Highest Average Monthly Turbidity Value
- Filtered Surface Water
 - The Highest Single Turbidity Measurement and the Lowest Monthly Percentage of Samples Meeting the Appropriate Turbidity Limits
- Unfiltered Surface Water Meeting Filtration Avoidance Criteria
 - The Highest Monthly Turbidity Value



Identify Data Required for the CCR: DBPs

- Health Effects Language Must Be Included:
 - If System Serves over 10,000 Population; and
 - Is in Compliance with the Current MCL of 100 ppb for TTHMs <u>but</u> Exceeds 80 ppb TTHMs



Identify Data Required for the CCR: Source Water Assessments

If Completed:

- Notification to Customers of Availability of Assessment and Information on How to Obtain a Copy
- If Assessment Was Provided or Approved by the Primacy Agency a Brief Summary of the System's Susceptibility to Potential Sources of Contamination



Identify Data Required for the CCR: Required Additional Health Information

- Drinking Water/Bottled Water Contaminant Explanation
 - Explanation Contains Both Mandatory Language and Language That Can Be Altered by the System
 - Mandatory Language [§141.153(h)(1)(iv) of the Rule]
 - Every CCR Must Contain This Text
 - Statement That the Presence of Contaminants Does Not Necessarily Indicate a Health Risk
 - Include EPA's Safe Drinking Water Hotline Number



Identify Data Required for the CCR: Required Additional Health Information (cont.)

Mandatory Language (cont.)

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

- Language That Can Be Altered by the System
 [§141.153(h)(1)(i) (iii) of the Rule]
 - Information on Sources of Drinking Water
 - Contaminants That May Be Present in Source Water
 - Why EPA and the Food and Drug Administration (FDA)
 Establish Regulations

Identify Data Required for the CCR: Required Additional Health Information (cont.)

- Warning about the Vulnerability of Some Populations to Microbial Contaminants in Drinking Water
 - Explanation Encourages Those Who May Be Particularly at Risk from Infections to Seek Advice from Health Care Provider
 - EPA Safe Drinking Water Hotline Number Included to Access More Information
 - Mandatory Language Provided



Identify Data Required for the CCR: Required Additional Health Information (cont.)

 Mandatory Language for Warning to Vulnerable Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

 Every CCR Must Contain This Explanation, Prominently Displayed Somewhere in the Report

Format Critical Data: Numeric Presentation

 Detected Contaminants Presented With MCL As a Number Greater Than or Equal to 1

MCLG and Detected Level in Same Units As MCL

Round Detected Levels Before Conversion



Format Critical Data: Table(s)

- For Detected Unregulated Contaminants for Which Monitoring Is Required (except Cryptosporidium)
 - Table(s) Must Contain the Average of Any Monitoring Results from the Year and the Range of Detections
 - The CCR May Also Include a Brief Explanation for Why a System Monitors for Unregulated Contaminants



Format Critical Data: Table(s) (cont.)

 Table(s) Must Contain The Likely Source(s) of Each Detected Contaminant, According to the Best Information Known to the Water System

Specific Information Regarding Contaminants
 Should Be Used When Available



Format Critical Data: Table(s) (cont.)

- For Any Detected Contaminant That Violates an MCL, a TT, or Exceeds an AL, the CCR Must Contain:
 - A Clear Indication in the Table(s) of the Violation or Exceedence
 - Near By, but Not In, the Table(s), a Clear and Easy to Understand Explanation of the Violation
 - An Explanation of the Violation Includes Length, Potential Health Effects, and CWSs Actions



Format Critical Data: Table(s) (cont.)

- Systems That Distribute Water to its Customers from Multiple Hydraulically Independent Distribution Systems Fed From Different Raw Water Sources Should:
 - Include in the Table(s) Separate Columns for Detection
 Data for Each Service Area
 - Include a Description of the Area Served by Each Distribution System



Format Critical Data: Rounding Data

- Prior to Conversion to MCL Equivalent Units
- Example: Glyphosate Detected at 0.055 mg/l

	Detected (mg/l)	Compliance (mg/l)	Multiply by	Units For CCR (ppb)
Monitoring	0.055	0.06	1,000	60
MCL		0.7	1,000	700



Compile Desired Optional Information

- System Map or Diagram
- Planned Projects or Known Future Needs
- Additional Concerns
 - Source Water Protection Efforts
- Results of Voluntary Monitoring
- Must Be Consistent With and Not Detract from the Purpose of the Report

CCR Layout

Easy to Read

 Minimum Criteria for Data, Definitions and Educational Information

Optional Information

★ Limit Text to Avoid Too Much Jargon or Too Much Information

CCR Delivery to Customers, Primacy Agency, Etc.

- Direct Delivery
- Good Faith Efforts to Non-Bill Paying Customers
- Advertise Availability
 - Internet
 - Newspaper



CCR Certification to Primacy Agency

- Must Send Certification to the Primacy Agency No Later Than 3 Months After the Report Is Due
- Two Required Elements
 - Distributed the CCR to Its Customers
 - Used in the Report Information That Is Correct and Consistent With Compliance Monitoring Data Previously Submitted to the Primacy Agency



Resources

- EPA Template (CCR Writer)
- American Water Works Association (AWWA)
 Template (CCR Builder)
- National Rural Water Association (NRWA) Template
- Midwest Assistance Program (MAP) Hard-Copy Template
- State-Specific Templates
- EPA Guidance for Water Suppliers



Links on the Internet

- Links to Individual System CCRs
 - EPA Will Work To Setup Links
 - AWWA Offering Service To Help Members Put CCRs
 On-Line



EPA Information on the Internet

- www.epa.gov/safewater
 - Fact Sheet On Drinking Water Regulations
 - Fact Sheet On Each Regulated Contaminant With Extensive Health Effects Information
 - CCR Rule, Summary Fact Sheet, Electronic Template for Operators
 - E-mail and Telephone Number Links for Answering Individual Questions

Workshops 2 and 3

How to Prepare a CCR



